

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Claim Amendments

Claim 1 has been amended to further define the amino acid derivative.

Claim 6 has been canceled in light of the amendments to claim 1.

New claim 23 has been added to further clarify that “an amount of not less than 1% by weight of the amino acid derivative is ionically bonded to the polymer”. Support for this amendment can be found in paragraph [0030] of the specification.

Interview Summary

Applicants thank the Examiner for conducting a teleconference with Applicants’ representative on May 15, 2011.

During the teleconference, Applicants’ representative inquired when the Examiner expected to act on an RCE once it has been filed, and the Examiner indicated that he expected to act “rather quickly”, since he does not currently have a large backlog of cases.

Next, Applicants’ representative asked whether amending claim 1 to incorporate the subject matter of claim 6 would be effective to avoid a first action final rejection after RCE. The Examiner indicated that since the limitations of claim 6 are currently pending, such an amendment would merely move an examined limitation into another claim, and thus, a first action final rejection would likely be appropriate. However, the Examiner further indicated that a first action final rejection can be avoided by adding new dependent claims with new limitations.

Applicants thank the Examiner for his kind and helpful comments.

Rejections Under 35 U.S.C. § 103(a)

The patentability of the present invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

The rejection of claims 1, 2, 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Nakashima et al. (U.S. 7,273,501) in view of Nomura et al. (JP 08-060547), and the rejection of claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Nakashima in view of Nomura, and further in view of Hirose et al. (JP 2002-013071), are respectfully traversed.

The present invention is directed to a polymer ionically bonded to an amino acid derivative, which exhibits skin care properties. The essential feature of the present invention is that the amino acid derivative is retained on the polymer by ionic bonds, whereby the amino acid derivative is released in a sustained (gradual) manner.

The Examiner has rejected the present invention of claims 1, 2, 7 and 8 over a combination of Nakashima and Nomura. Nakashima discloses a moisture absorptive and desorptive fiber of acrylic acid type. Nomura discloses a fiber applied with sericin. As to claim 6, the Examiner has additionally cited Hirose, which discloses a fiber applied with arginine.

By the present amendment to claim 1, sericin is excluded from the amino acid derivative. Accordingly, since Nomura is cited merely for disclosing a fiber skin care product comprising sericin, and amended claim 1 excludes sericin, Nomura is no longer relevant to the present invention. Thus, a combination of the teachings of Nomura and Nakashima fails to suggest the invention of amended claim 1, wherein “the amino acid derivative is selected from the group consisting of lysine, arginine and histidine”.

Based on the above, the rejection of claims 1, 2, 7 and 8 over a combination of Nakashima and Nomura has been overcome and should therefore be withdrawn.

The rejection of claim 6 has been rendered moot by the cancellation of claim 6. Further, this rejection is inapplicable to amended claim 1, which incorporates the subject matter of cancelled claim 6. The Hirose reference is well known to the present inventors, and is discussed in the “Background Art” section of the present specification (please see paragraph [0004] of the specification). For the Examiner’s convenience, Applicants attach herewith a machine

translation of Hirose as well as a partial translation of the Hirose claims (please see Attachment 1).

Hirose discloses a fiber applied with arginine. However, Hirose only discloses the application of arginine via a binder (please see claims 2 and 8 of Hirose). Thus, no other application method is disclosed in Hirose. Further, Hirose discloses that the washing durability of arginine can be improved by applying arginine to a fiber via a binder (please see [0007] and [0013] of Hirose). Therefore, it is an essential element of Hirose that arginine is applied to a fiber via a binder.

Based on the teachings of Hirose, a person having ordinary skill in the art would have never applied arginine to the fiber of Nakashima without a binder as taught in Nomura, since Hirose discloses that applying arginine to a fiber via a binder imparts improved properties.

Further, for a fiber onto which arginine is applied via a binder, as taught by Hirose, to exhibit superior washing durability, the arginine must be firmly bound to the fiber, and thus, such a fiber is inferior in sustained-release properties, which is achieved by the present invention through ionic bonds (please see paragraph [0004] of the present specification).

The present invention requires that the amino acid derivative is ionically bonded to a polymer. However, if Nakashima and Nomura were combined with Hirose, a moisture absorptive and desorptive fiber of acrylic acid type, wherein arginine is applied via a binder, would be achieved. Thus, based on the combination of Nakashima, Nomura and Hirose, an amino acid derivative would not be ionically bonded to the polymer, as in the present invention, since a binder is used to apply arginine to the polymer. Accordingly, a combination of the teachings of Nakashima, Nomura and Hirose fails to suggest the present invention, wherein an amino acid derivative is ionically bonded to a fiber-shaped polymer.

Thus, the constitution (application of amino acid derivative by ionic bonds) and effects (sustained-release properties) of the present invention of claim 1 are not suggested by the cited references.

New claim 23 depends on independent claim 1, and recites a new and previously unexamined feature to further avoid a first action final rejection. Further, as discussed above, the references cited by the Examiner fail to suggest ionically bonding the amino acid derivative to a

polymer, and therefore, clearly also fail to suggest the features of claim 23, wherein “an amount of not less than 1% by weight of the amino acid derivative is ionically bonded to the polymer”.

Accordingly, since the combination of references cited by the Examiner fails to teach each and every feature of the present invention, these rejections have been overcome and should be withdrawn.

Conclusion

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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August 18, 2011

ATTACHMENTS:

1. Machine translation of JP 2002-013071 together with English translation of claims.